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October 4, 1993

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W.
Room 222
Washington, D.C. 20554

Re: MM Docket No. 93-178
Howard B. Dolgoff
(File No. BPH-911223ME)

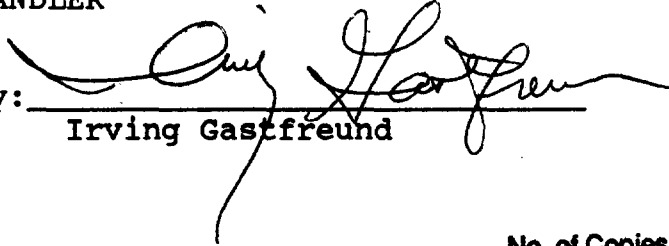
Dear Mr. Caton:

Submitted herewith for filing, on behalf of our client, Howard B. Dolgoff, an applicant in the above-referenced comparative hearing proceeding (MM Docket No. 93-178), are an original and six (6) copies of a Joint Engineering Exhibit on behalf of both Howard B. Dolgoff and Mark Renee Carter in the proceeding. Kindly refer this submission to Administrative Law Judge John M. Frysiak.

Please direct any inquiries concerning this submission to the undersigned.

Respectfully submitted,

KAYE, SCHOLER, FIERMAN, HAYS &
HANDLER

By: 
Irving Gastfreund

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BEFORE THE

Federal Communications Commission

OCT - 4 1993

WASHINGTON, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

| | | |
|---------------------------------|---|-----------------------------|
| In re Applications of |) | MM Docket No. <u>93-178</u> |
| HOWARD B. DOLGOFF and |) | File No. BPH-911223ME |
| MARK AND RENEE CARTER |) | File No. BPH-911224MD |
| For a Construction Permit For a |) | |
| New FM Radio Station on Channel |) | |
| 292A in Miramar Beach, Florida |) | |

TO: Administrative Law Judge John M. Frysia**JOINT ENGINEERING EXHIBIT**

Irving Gastfreund, Esq.

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901 15th Street, N.W.
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(202) 682-3526

Counsel for Howard B. Dolgoff

October 4, 1993

JULES COHEN & ASSOCIATES, P.C.

CONSULTING ELECTRONICS ENGINEERS

WASHINGTON, D.C. 20036

**JOINT ENGINEERING STATEMENT
MM DOCKET NO. 93-178
APPLICATIONS OF
HOWARD B. DOLGOFF
(FCC FILE NO. BPH-911223ME)
MARK AND RENÉE CARTER
(FCC FILE NO. BPH-911224MD)
FOR CONSTRUCTION PERMIT FOR A NEW
FM STATION ON CHANNEL 292A IN
MIRAMAR BEACH, FLORIDA**

This joint engineering statement has been prepared on behalf of Howard B. Dolgoff (hereafter "Dolgoff") and Mark and Renée Carter (hereafter "Carter"). Dolgoff and Carter have mutually exclusive applications pending (FCC File Numbers BPH-911223ME and BPH-911224MD, respectively) for a construction permit for a new FM station on Channel 292A in Miramar Beach, Florida.¹ This case was designated for hearing in MM Docket No. 93-178.²

The undersigned has independently determined the population and land area within each proposal's 60 dBu contour. The undersigned also has verified that the proposed Channel 292A, Miramar Beach, Florida, service area currently is served by five or more other aural services in addition to that proposed by the applicants. A description of the methodologies used in preparing the studies contained herein follows the presentation of the findings.

¹ Dolgoff proposes to operate with maximum effective radiated power of 6 kilowatts and antenna radiation center height above average terrain of 100 meters (102 meters above mean sea level) at 30° 23' 31" North Latitude, 86° 18' 25" West Longitude. Carter proposes to operate with effective radiated power of 3 kilowatts and antenna radiation center height above average terrain of 100 meters (102 meters above mean sea level) at 30° 23' 07" North Latitude, 86° 18' 03" West Longitude. The proposed sites are 0.9 kilometer apart.

²See *Hearing Designation Order*, Released June 29, 1993, 8 FCC Rcd 4337 (1993).

Findings

Figure 1 of this statement shows the calculated 60 dBu (1 millivolt per meter), F(50,50) contours for the Dolgoff and Carter proposals. According to the 1990 Census, the Dolgoff proposal will provide signal strength of 60 dBu or better to 54,447 persons residing in 1,062 square kilometers, and the Carter proposal will provide signal strength of 60 dBu or better to 42,018 persons residing in 798 square kilometers. Referenced to the Carter proposal, this represents a difference in the populations served by the two proposals of 12,429 persons or 29.6 percent and a difference in the area served by the two proposals of 26.4 square kilometers or 33.1 percent.

Figure 2 of this statement is an other services study showing the presence of at least five other aural services within the proposed Channel 292A, Miramar Beach, Florida, service area. The proposed service area is depicted by a thicker contour than the contours used to depict other services. Table 3 is a tabulation of the facilities used in preparing the other services study. Figure 2 and Table 3 identify only that number of stations needed to show five or more other aural services within the proposed service area. Many other stations not shown on Figure 2 or identified in Table 3 also serve the proposed service area at Miramar Beach.

Methodology

The distances to the 60 dBu contours were determined using the conventional methodology described in Section 73.313 of the FCC's Rules. The overall antenna radiation center height above average terrain for each proposal was not recalculated. The height above average terrain in each radial direction was determined by subtracting the average terrain elevation along the radial from the antenna radiation center height above mean sea level. The resultant height above average terrain was used in determining the distance to the 60 dBu contour in that radial direction. Terrain data were obtained from the National Geophysical Data Center 30-second terrain elevation database.

Joint Engineering Statement
Miramar Beach, Florida

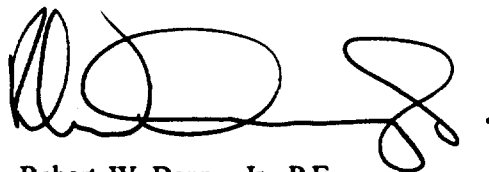
Page 3

Distance-to-contour calculations were made at five-degree intervals to show accurately the predicted 60 dBu contour for the Dolgoff proposal which specifies a directional antenna. For the purposes of consistency, the location of Carter's 60 dBu contour also was calculated at five degree intervals, even though Carter proposes use of a nondirectional antenna. The data used in preparing the map of Figure 1 are contained in Tables 1 and 2.

The other services study of Figure 2 was prepared using elements of the methodology which evolved out of the Greenup, Kentucky, proceeding.³ In particular, uniform terrain and, with one exception, nondirectional operation with maximum facilities were assumed. The exception, consistent with the accepted procedure, was use of the actual rather than maximum facilities for Class C stations in determining the distance to the service (60 dBu) contour over uniform terrain. Since Dolgoff's proposed 60 dBu contour completely encloses that of Carter, only Dolgoff's simplified service area is shown on the map of Figure 2.

As stated earlier, only the minimum number of stations required to show five other aural services within the Channel 292A, Miramar Beach, service area were identified. Many other aural services are available at Miramar Beach.

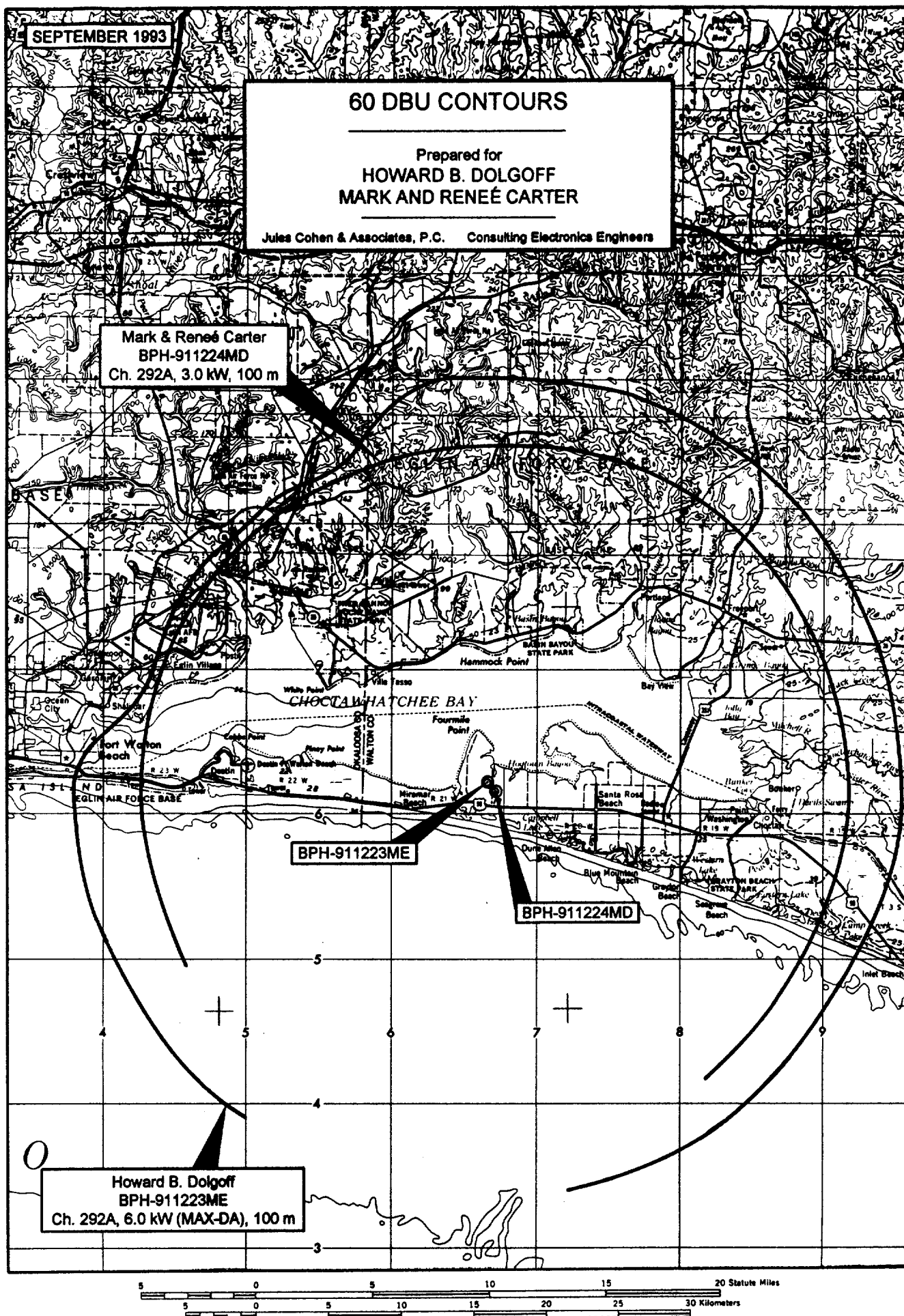
I declare under penalty of perjury that the foregoing is true and correct. Executed on September 13, 1993.

A handwritten signature in black ink, appearing to read 'Robert W. Denny, Jr.', with a stylized flourish at the end.

Robert W. Denny, Jr., P.E.

³See *Memorandum Opinion and Order*, Released April 27, 1989, 4 FCC Rcd 3843 (1989), and *Memorandum Opinion and Order*, Released March 11, 1991, 6 FCC Rcd 1493 (1991).

Figure 1



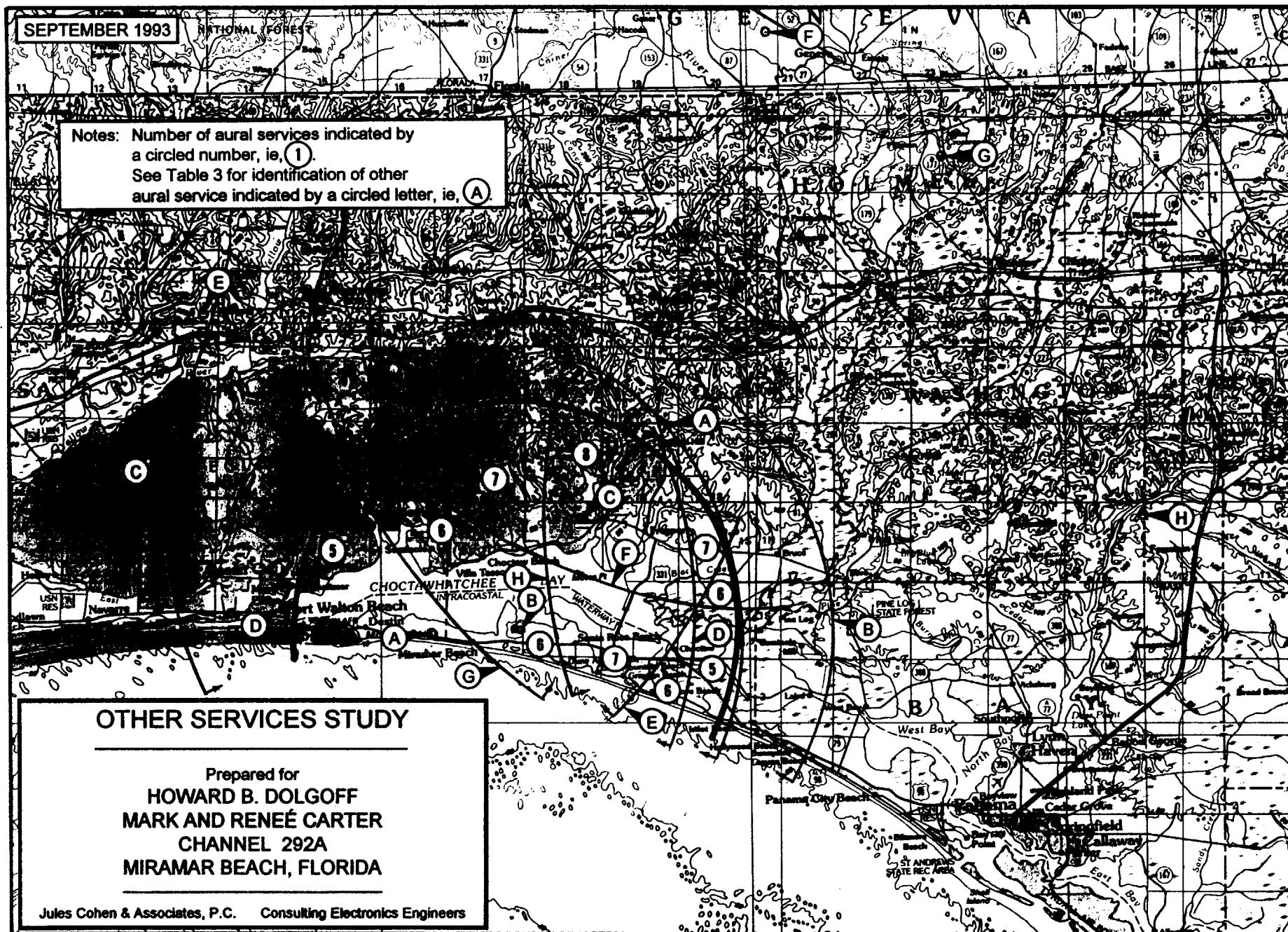


Figure 2

**JOINT ENGINEERING STATEMENT
MM DOCKET NO. 93-178
APPLICATIONS OF
HOWARD B. DOLGOFF
(FCC FILE NO. BPH-911223ME)
MARK AND RENÉE CARTER
(FCC FILE NO. BPH-911224MD)
FOR CONSTRUCTION PERMIT FOR A NEW
FM STATION ON CHANNEL 292A IN
MIRAMAR BEACH, FLORIDA**

Tabulation of Distances to 60 dBu Contour

FCC File No. BPH-911223ME
Howard B. Dolgoff
Ch. 292A, 6.0 kW (Max-DA), 100 m

Site Coordinates: 30° 23' 31" NL
86° 18' 25" WL

Antenna Radiation Center Height: 102 m AMSL

| <u>Azimuth</u> (deg. T) | Antenna Radiation Center Height Above Average <u>Terrain</u> (meters) | Effective Radiated <u>Power</u> (dBk) | Distance to 60 dBu F(50,50) <u>Contour</u> (km) |
|----------------------------|-----------------------------------------------------------------------------------|------------------------------------------------|-------------------------------------------------------------|
| 0 | 95 | 7.78 | 27.8 |
| 5 | 96 | 7.78 | 28.0 |
| 10 | 97 | 7.78 | 28.1 |
| 15 | 98 | 7.78 | 28.2 |
| 20 | 99 | 7.78 | 28.4 |
| 25 | 101 | 7.78 | 28.6 |
| 30 | 101 | 7.78 | 28.6 |
| 35 | 101 | 7.78 | 28.7 |
| 40 | 102 | 7.78 | 28.7 |
| 45 | 102 | 7.78 | 28.7 |
| 50 | 102 | 7.78 | 28.7 |
| 55 | 102 | 7.78 | 28.7 |
| 60 | 102 | 7.78 | 28.7 |
| 65 | 102 | 7.78 | 28.7 |
| 70 | 102 | 7.78 | 28.7 |

FCC File No. BPH-911223ME
Howard B. Dolgoff
Ch. 292A, 6.0 kW (Max-DA), 100 m
(Continued)

Site Coordinates: 30° 23' 31" NL
86° 18' 25" WL

Antenna Radiation Center Height: 102 m AMSL

| <u>Azimuth</u> (deg. T) | Antenna Radiation Center Height Above Average <u>Terrain</u> (meters) | Effective Radiated <u>Power</u> (dBk) | Distance to 60 dBu F(50,50) <u>Contour</u> (km) |
|----------------------------|-----------------------------------------------------------------------------------|------------------------------------------------|-------------------------------------------------------------|
| 75 | 102 | 7.78 | 28.7 |
| 80 | 102 | 7.78 | 28.7 |
| 85 | 102 | 7.78 | 28.7 |
| 90 | 102 | 7.78 | 28.7 |
| 95 | 102 | 7.78 | 28.7 |
| 100 | 102 | 7.78 | 28.7 |
| 105 | 100 | 7.78 | 28.5 |
| 110 | 99 | 7.78 | 28.3 |
| 115 | 98 | 7.78 | 28.3 |
| 120 | 99 | 7.78 | 28.3 |
| 125 | 98 | 7.78 | 28.3 |
| 130 | 99 | 7.78 | 28.4 |
| 135 | 99 | 7.78 | 28.3 |
| 140 | 101 | 7.78 | 28.6 |
| 145 | 102 | 7.78 | 28.7 |
| 150 | 102 | 7.78 | 28.7 |
| 155 | 102 | 7.78 | 28.7 |
| 160 | 102 | 7.78 | 28.7 |
| 165 | 102 | 7.78 | 28.7 |
| 170 | 102 | 7.78 | 28.7 |
| 175-210 ¹ | | | |
| 215 | 100 | 7.78 | 28.5 |
| 220 | 101 | 7.78 | 28.6 |
| 225 | 101 | 7.78 | 28.6 |
| 230 | 101 | 7.78 | 28.6 |

¹ The entire 3-16 kilometer portion of each radial in this range lies over the Gulf of Mexico. There is no U.S. land area beyond 3 kilometers within the 34 dBu F(50,50) contour in these directions.

FCC File No. BPH-911223ME
Howard B. Dolgoff
Ch. 292A, 6.0 kW (Max-DA), 100 m
(Continued)

Site Coordinates: 30° 23' 31" NL
86° 18' 25" WL

Antenna Radiation Center Height: 102 m AMSL

| <u>Azimuth</u> (deg. T) | Antenna Radiation Center Height Above Average <u>Terrain</u> (meters) | Effective Radiated <u>Power</u> (dBk) | Distance to 60 dBu F(50,50) <u>Contour</u> (km) |
|----------------------------|-----------------------------------------------------------------------------------|------------------------------------------------|-------------------------------------------------------------|
| 235 | 100 | 7.78 | 28.5 |
| 240 | 99 | 7.78 | 28.4 |
| 245 | 100 | 7.78 | 28.5 |
| 250 | 101 | 7.78 | 28.7 |
| 255 | 102 | 7.78 | 28.7 |
| 260 | 101 | 7.78 | 28.7 |
| 265 | 100 | 7.78 | 28.5 |
| 270 | 102 | 7.78 | 28.7 |
| 275 | 102 | 6.78 | 27.3 |
| 280 | 102 | 5.78 | 25.9 |
| 285 | 102 | 4.78 | 24.6 |
| 290 | 102 | 4.77 | 24.6 |
| 295 | 102 | 4.77 | 24.6 |
| 300 | 102 | 4.77 | 24.6 |
| 305 | 102 | 4.77 | 24.6 |
| 310 | 100 | 4.77 | 24.4 |
| 315 | 98 | 4.77 | 24.2 |
| 320 | 99 | 4.77 | 24.3 |
| 325 | 98 | 4.77 | 24.2 |
| 330 | 97 | 4.77 | 24.0 |
| 335 | 95 | 4.78 | 23.9 |
| 340 | 95 | 5.78 | 25.2 |
| 345 | 96 | 6.78 | 26.6 |
| 350 | 94 | 7.78 | 27.8 |
| 355 | 94 | 7.78 | 27.7 |

JOINT ENGINEERING STATEMENT
MM DOCKET NO. 93-178
APPLICATIONS OF
HOWARD B. DOLGOFF
(FCC FILE NO. BPH-911223ME)
MARK AND RENÉE CARTER
(FCC FILE NO. BPH-911224MD)
FOR CONSTRUCTION PERMIT FOR A NEW
FM STATION ON CHANNEL 292A IN
MIRAMAR BEACH, FLORIDA

Tabulation of Distances to 60 dBu Contour

FCC File No. BPH-911224MD
Mark and Renée Carter
Ch. 292A, 3.0 kW, 100 m

Site Coordinates: 30° 23' 07" NL
86° 18' 03" WL

Antenna Radiation Center Height: 102 m AMSL

| <u>Azimuth</u> (deg. T) | Antenna Radiation Center Height Above Average <u>Terrain</u> (meters) | Effective Radiated <u>Power</u> (dBk) | Distance to 60 dBu F(50,50) <u>Contour</u> (km) |
|----------------------------|-----------------------------------------------------------------------------------|------------------------------------------------|-------------------------------------------------------------|
| 0 | 97 | 4.77 | 24.0 |
| 5 | 97 | 4.77 | 24.1 |
| 10 | 98 | 4.77 | 24.2 |
| 15 | 99 | 4.77 | 24.3 |
| 20 | 100 | 4.77 | 24.4 |
| 25 | 101 | 4.77 | 24.5 |
| 30 | 101 | 4.77 | 24.6 |
| 35 | 102 | 4.77 | 24.6 |
| 40 | 102 | 4.77 | 24.6 |
| 45 | 102 | 4.77 | 24.6 |
| 50 | 102 | 4.77 | 24.6 |
| 55 | 102 | 4.77 | 24.6 |
| 60 | 102 | 4.77 | 24.6 |
| 65 | 102 | 4.77 | 24.6 |

FCC File No. BPH-911224MD
Mark and Renée Carter
Ch. 292A, 3.0 kW, 100 m
(Continued)

Site Coordinates: 30° 23' 07" NL
86° 18' 03" WL

Antenna Radiation Center Height: 102 m AMSL

| <u>Azimuth</u> (deg. T) | Antenna Radiation Center Height Above Average <u>Terrain</u> (meters) | Effective Radiated <u>Power</u> (dBk) | Distance to 60 dBu F(50,50) <u>Contour</u> (km) |
|----------------------------|-----------------------------------------------------------------------------------|------------------------------------------------|-------------------------------------------------------------|
| 70 | 102 | 4.77 | 24.6 |
| 75 | 102 | 4.77 | 24.6 |
| 80 | 102 | 4.77 | 24.6 |
| 85 | 102 | 4.77 | 24.6 |
| 90 | 102 | 4.77 | 24.6 |
| 95 | 102 | 4.77 | 24.6 |
| 100 | 101 | 4.77 | 24.5 |
| 105 | 99 | 4.77 | 24.3 |
| 110 | 98 | 4.77 | 24.2 |
| 115 | 98 | 4.77 | 24.2 |
| 120 | 97 | 4.77 | 24.1 |
| 125 | 99 | 4.77 | 24.3 |
| 130 | 98 | 4.77 | 24.2 |
| 135 | 99 | 4.77 | 24.2 |
| 140 | 101 | 4.77 | 24.5 |
| 145 | 102 | 4.77 | 24.6 |
| 150-235 ¹ | | | |
| 240 | 101 | 4.77 | 24.5 |
| 245 | 101 | 4.77 | 24.5 |
| 250 | 100 | 4.77 | 24.4 |
| 255 | 100 | 4.77 | 24.4 |
| 260 | 101 | 4.77 | 24.5 |
| 265 | 102 | 4.77 | 24.6 |
| 270 | 100 | 4.77 | 24.4 |
| 275 | 102 | 4.77 | 24.6 |

¹ The entire 3-16 kilometer portion of each radial in this range lies over the Gulf of Mexico. There is no U.S. land area beyond 3 kilometers within the 34 dBu F(50,50) contour in these directions.

FCC File No. BPH-911224MD
Mark and Renée Carter
Ch. 292A, 3.0 kW, 100 m
(Continued)

Site Coordinates: 30° 23' 07" NL
86° 18' 03" WL

Antenna Radiation Center Height: 102 m AMSL

| <u>Azimuth</u> (deg. T) | Antenna Radiation Center Height Above Average Terrain (meters) | Effective Radiated Power (dBk) | Distance to 60 dBu F(50,50) Contour (km) |
|----------------------------|----------------------------------------------------------------------------|-----------------------------------------|------------------------------------------------------|
| 285 | 102 | 4.77 | 24.6 |
| 290 | 102 | 4.77 | 24.6 |
| 295 | 102 | 4.77 | 24.6 |
| 300 | 102 | 4.77 | 24.6 |
| 305 | 102 | 4.77 | 24.6 |
| 310 | 100 | 4.77 | 24.5 |
| 315 | 99 | 4.77 | 24.3 |
| 320 | 99 | 4.77 | 24.3 |
| 325 | 98 | 4.77 | 24.2 |
| 330 | 97 | 4.77 | 24.1 |
| 335 | 97 | 4.77 | 24.0 |
| 340 | 96 | 4.77 | 24.0 |
| 345 | 97 | 4.77 | 24.1 |
| 350 | 96 | 4.77 | 24.0 |
| 355 | 95 | 4.77 | 23.8 |

JOINT ENGINEERING STATEMENT
MM DOCKET NO. 93-178
APPLICATIONS OF
HOWARD B. DOLGOFF
(FCC FILE NO. BPH-911223ME)
MARK AND RENÉE CARTER
(FCC FILE NO. BPH-911224MD)
FOR CONSTRUCTION PERMIT FOR A NEW
FM STATION ON CHANNEL 292A IN
MIRAMAR BEACH, FLORIDA

Identification of Some Other Aural Services Within the
Channel 292A, Miramar Beach, Florida, Service Area

Refer to Figure 2 for Contour Locations

| <u>Identifier</u> | <u>Channel</u> | <u>Station/Location</u> | <u>Geographic Coordinates</u> (° -' -") | <u>Reference Distance</u> (km) |
|-------------------|----------------|------------------------------------------------|-------------------------------------------------|---------------------------------------|
| A | 221C3 | WMMK, Destin, FL | 30-23-08 N 86-24-52 W | 39 |
| B | 271C3 | WWAV, Santa Rosa Beach, FL | 30-23-17 N 86-17-55 W | 39 |
| C | 276C2 | WLGH, De Funiak Springs, FL | 30-30-53 N 86-13-12 W | 52 |
| D | 258C2 | WKSM, Fort Walton Beach, FL | 30-24-51 N 86-37-40 W | 52 |
| E | 243C | WJUS, Fort Walton Beach, FL (100 kW, 300 m) | 30-45-04 N 86-42-38 W | 72 |
| F | 229C1 | WRJM-FM, Geneva, AL | 31-02-42 N 85-57-33 W | 72 |
| G | 245C | WDJR, Enterprise, AL (100 kW, 462 m) | 30-55-11 N 85-44-30 W | 84 |
| H | 253C | WFSY, Panama City, FL (100 kW, 332 m) | 30-30-41 N 85-29-24 W | 75 |

CERTIFICATE OF SERVICE

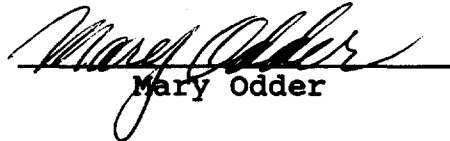
I, Mary Odder, a secretary with the law firm of Kaye, Scholer, Fierman, Hays & Handler, hereby certify that on this 4th day of October, 1993, have caused a copy of the foregoing Joint Engineering Exhibit to be hand-delivered or to be sent via first-class United States mail, postage prepaid, to the following:

Honorable John M. Frysiak*
Administrative Law Judge
Federal Communications Commission
2000 L Street, N.W.
Room 223
Washington, D.C. 20554

Paulette Laden, Esq.*
Hearing Branch, Enforcement Division
Mass Media Bureau
Federal Communications Commission
2025 M Street, N.W.
Room 7212
Washington, D.C. 20554

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Washington, D.C. 20591

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1275 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2404
Counsel for Mark and Renee Carter


Mary Odder

*/ Via Hand-Delivery